

CLAIMS

1. A connector module (100) including a housing (108), said housing (108) including two parallel rows (R1, R2) of contacts facing each other from one row to another, each of said contacts including a first terminal part (106) for  
5 connection to a conductor and an opposite second terminal part (107), two successive contacts of a same row defining a pair of contacts, wherein normally each of said second terminal parts (107) rests elastically against the second terminal part (107) opposite, said module (100) being characterized in that  
10 it includes a detachable card (104) providing an electrical connection and low pass filtering function for signals transmitted between said second terminal parts of at least one pair of contacts of a row, a so-called first row, and said second terminal parts of at least one pair of contacts on the  
15 other row, a so-called second pair, said detachable card (104) including connection elements on each of its faces, said connection elements establishing the connection between the opposite second terminal parts of each row by moving apart the second terminal parts which are normally in contact.

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2. The connector module (100) according to claim 1, characterized in that said first and second pairs of contacts are facing each other.

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3. The connector module (100) according to claim 1 or 2, characterized in that said first terminal parts for connection to a conductor form the front part of said housing (108) and in that said card is pluggable through the rear part of said housing (108) between said second terminal parts  
30 normally resting elastically and facing each other.

4. The connector module (100) according to any of claims 2 or 3, characterized in that said detachable card (104) provides at least one function for electrical connection between the second terminal parts of the pair of contacts along said first pair on the same row and said second terminal parts of the contact pair facing said first pair on the other row.

5. The connector module (100) according to the preceding claim, characterized in that said detachable card provides a high pass filter function between the second terminal parts of the pair of contacts along said first pair on the same row and said second terminals parts of the contact pair facing said first pair on the other row.

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6. The connector module (100) according to the preceding claims, characterized in that:

- the first row includes  $2n$  contact pairs forming  $n$  successive groups of two pairs of contacts,  $C_{2i}$  and  $C_{2i+1}$  on the one hand and  $C'_{2i}$  and  $C'_{2i+1}$  on the other hand, with  $i$  ranging from 0 to  $n-1$ ,  $n$  being an integer larger than or equal to 1,
- the second row includes at least  $2n$  contact pairs forming  $n$  successive groups of two pairs of contacts,  $C''_{2i}$  and  $C''_{2i+1}$  on the one hand and  $C'''_{2i}$  and  $C'''_{2i+1}$  on the other hand, the contacts  $C''_{2i}$  and  $C''_{2i+1}$  facing the contacts  $C_{2i}$  and  $C_{2i+1}$  and the contacts  $C'''_{2i}$  and  $C'''_{2i+1}$  facing contacts  $C'_{2i}$  and  $C'_{2i+1}$ ,
- said card includes the first face including  $2n$  pairs of connection elements forming  $n$  successive groups of two pairs of connection elements,  $E_{2i}$  and  $E_{2i+1}$  on the one hand and  $E'_{2i}$  and  $E'_{2i+1}$  on the other hand,

with  $i$  ranging from 0 to  $n-1$ , and a second face including  $n$  pairs of connection elements  $E''_{2i}$  and  $E''_{2i+1}$ , so that said card moves apart said second terminal parts normally in contact each other:

- 5           - the connection elements  $E_{2i}$  and  $E_{2i+1}$  come into contact with the second terminal parts of the contacts  $C_{2i}$  and  $C_{2i+1}$  respectively and the connection elements  $E'_{2i}$  and  $E'_{2i+1}$  come into contact with the second terminal parts of the contacts  $C'_{2i}$  and  $C'_{2i+1}$  respectively,
- 10           - the connection elements  $E''_{2i}$  and  $E''_{2i+1}$ , come into contact with the second terminal parts of the contacts  $C''_{2i}$  and  $C''_{2i+1}$  respectively,

15           said connection elements  $E'_{2i}$  and  $E'_{2i+1}$  being electrically connected to said connection elements  $E''_{2i}$  and  $E''_{2i+1}$  via a low pass filter located on said card.

7. The connector module (100) according to the preceding claim, characterized in that said card includes  $2n$  fingers cut out in said card forming  $n$  successive groups of two pairs of fingers,  $D_{2i}$  and  $D_{2i+1}$  on the one hand, and  $D'_{2i}$  and  $D'_{2i+1}$  on the other hand, with  $i$  ranging from 0 to  $n-1$ , said fingers  $E_{2i}$  and  $E_{2i+1}$  being metallized on each of said first and second faces of said card so as to form said connection elements  $E_{2i}$  and  $E_{2i+1}$  on the one hand and  $E''_{2i}$  and  $E''_{2i+1}$  on the other hand, and said fingers  $D'_{2i}$  and  $D'_{2i+1}$  being exclusively metallized on said first face of said card so as to form said connection elements  $E'_{2i}$  and  $E'_{2i+1}$ .

30           8. The connector module (100) according to any of claims 6 or 7, characterized in that said connection elements  $E'_{2i}$  and  $E'_{2i+1}$  are electrically connected to said connection elements  $E''_{2i}$  and  $E''_{2i+1}$ .

9. The connector module (100) according to the preceding claim, characterized in that said electrical connection is achieved via a high pass filter.

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10. The connector module (100) according to any of the preceding claims, characterized in that at least one pair of contacts is electrically connected to the opposite contact pair via a jumper element providing an electrical connection  
10 between the first terminal parts of the contacts facing each other.

11. The connector module (100) according to any of the preceding claims, characterized in that said first terminal  
15 parts are adapted in order to receive a conductor winding.

12. The connector module according to any of claims 1 to 10, characterized in that said first terminal parts include a self-stripping slit.

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13. A connector strip including a plurality of connector modules according to any of claims 1 to 12.

14. The connector strip according to the preceding  
25 claim, characterized in that it includes a support incorporating said plurality of strips, said support being rotatably mounted around an axis of rotation.

15. The connector strip (200) including a substantially  
30 rectangular attachment plate (201) including a first face on which a plurality of connector modules (100) according to claim 3 to 12 are removably attached, said housing on each of said modules including on its rear part, means for attaching

said module onto said first face, said modules being arranged as a row along a first direction, parallel with each other so that said first terminal parts for connection to a conductor are apparent on one face (202), the so-called front face, of said strip, the attachment plate having a plurality of slits showing said second terminal parts so that said cards (104) are pluggable through the second face of said plate via said slits.

10        16. The connector strip (200) according to the preceding claim, characterized in that said attachment plate (201) is rotably mounted around an axis of rotation (00') substantially extending along one side of said plate.

15        17. The connector strip (200) according to claim 16, characterized in that it includes an attachment block in the shape of a half rectangular parallelepiped, the first rectangular support of which (204) is intended to be mounted against a supporting element such as a wall and the second  
20 rectangular support (206) includes on its longitudinal side elements (207) for rotatably holding said plate (201).